Docket No.: A213-1010.1

ABSTRACT OF THE DISCLOSURE

An optical monitoring system for monitoring thin film deposition on a substrate includes a support bridge that is attached on an inside of a deposition chamber. The system further includes a fiber optic collimator having an optical fiber for incoming light, and another fiber optic collimator having an optical fiber for transmitted or reflected light from the substrate. The system further includes a shutter that is closed when a desired thin film thickness is deposited on the substrate.